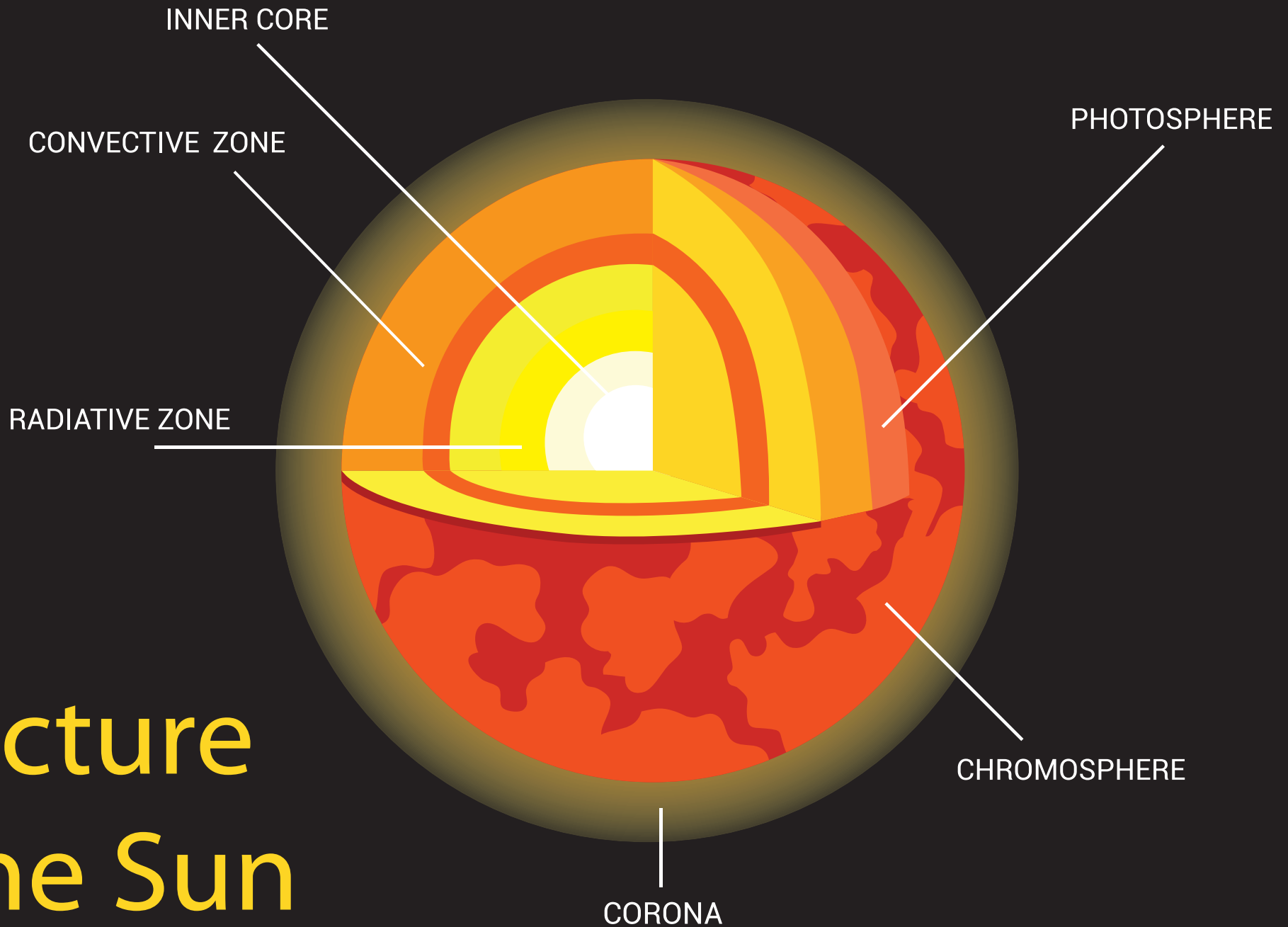


Structure of the Sun



Inside the Sun:

A) The Inner Core

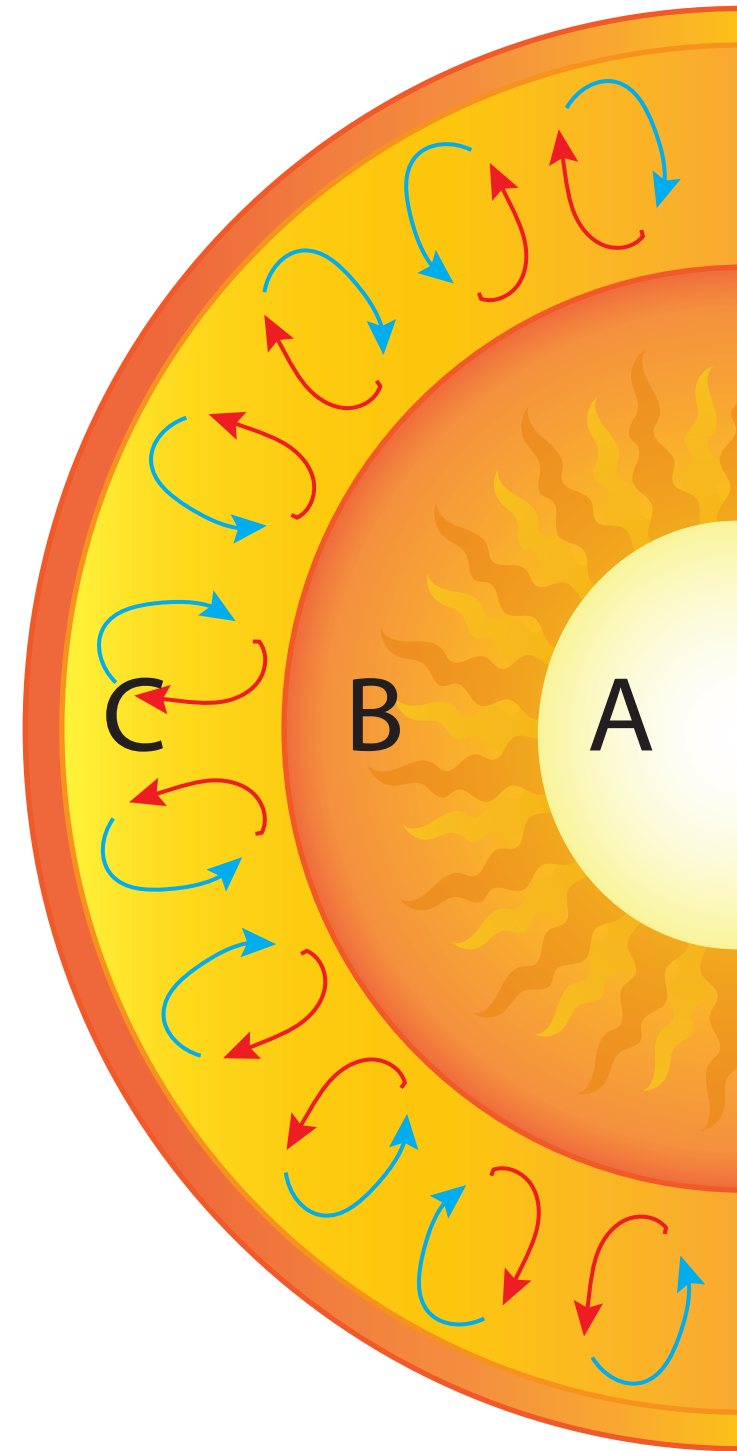
This is the hottest part of the Sun. Temperatures and pressure is so high here that fusion can take place. Hydrogen atoms are torn apart then fused together to make helium. The result of this reaction is light and heat.

B) The Radiative Zone

Heat and light radiate outward from the core through the radiative zone. Photons of light bounce around, zig zagging their way outward.

C) The Convective Zone

Gases in the convective zone are heated and move toward the outer regions of the Sun. Then they begin to cool and sink back down again, only to begin heating and rising again. Just like water in a bubbling pot.



The Sun's Atmosphere:

A) The Photosphere

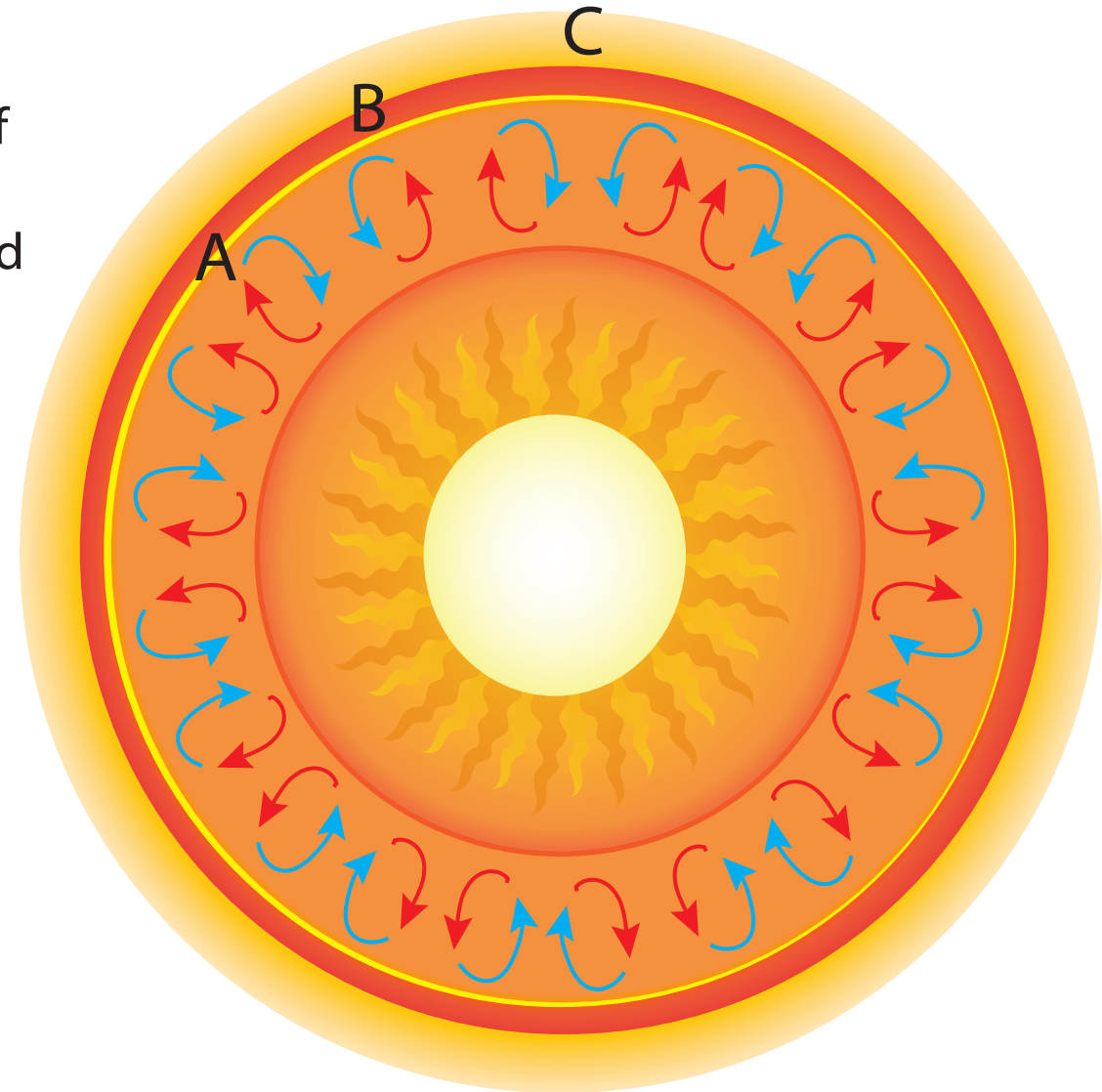
This is the visible exterior of the Sun. However, the Sun is not solid but a big ball of gases held together by gravity. Fiery solar flares shoot out from here. Cooler areas called sunspots also develop on the photosphere.

B) The Chromosphere

The chromosphere is the lower level of the Sun's atmosphere. It looks bright red when it is viewed during a solar eclipse.

C) The Corona

The corona is the upper part of the Sun's atmosphere. It is hotter here than on the photosphere, the surface of the Sun. Plasma flows out from the upper areas of the corona. This radiation is called solar wind.



A) Solar Flares

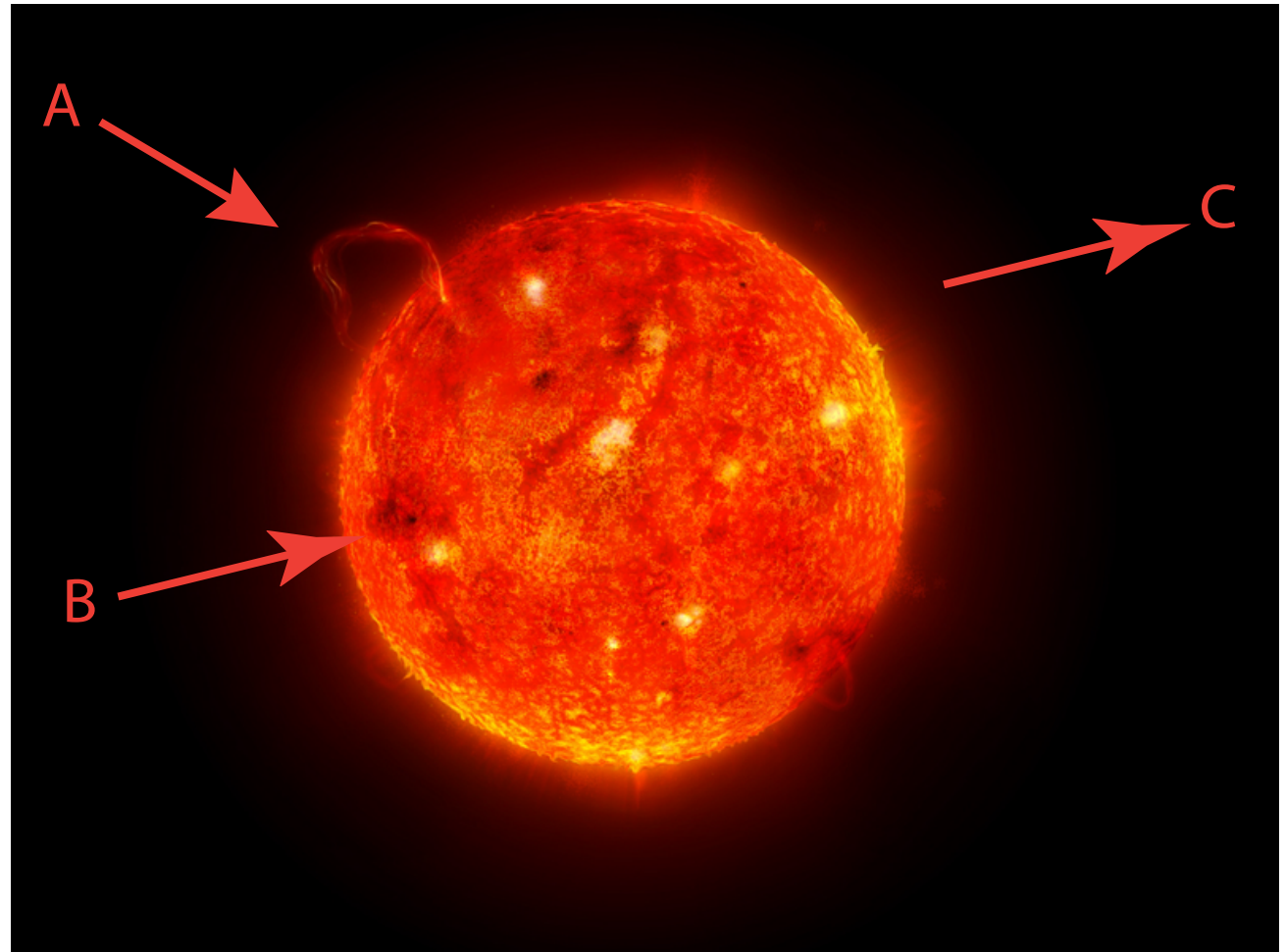
Solar flares shoot out from the Sun's photosphere when a build up of magnetic energy is suddenly released.

B) Sun Spots

Cool spots appear on the photosphere when the Sun's magnetic field breaks through. These look like black spots on the Sun's surface. They can disappear quickly or be swept around with the Sun's rotation.

C) Solar Wind

Radiation from the Sun drifts away from the outer corona as 'solar wind'. The Earth's magnetic field protects us from this damaging radiation.



The Sun's magnetic field is responsible for some pretty spectacular events on the Sun's surface.